



PIMLICO
STATE HIGH SCHOOL
Making a world of difference

MATHEMATICS

2021 Subjects for Year 10 into 11



MATHEMATICS

- At Pimlico, all students will study mathematics through to Year 12
- Regardless of whether you see yourself pursuing a career in maths, being functionally numerate is essential if you are going to succeed in life after school
- Making the right choice for you depends on the maths you are currently studying in Year 10, what you are currently achieving, and what pre-requisites you are after



MATHS SUBJECTS

1. Essential Maths (Applied)
2. General Maths (General)
3. Mathematical Methods (General)
4. Specialist Maths (General)

Note: students taking Specialist must be also taking Maths Methods



ESSENTIAL MATHS

Essential Maths covers content that is relevant to being a functional adult in real life. Areas covered include finances (savings, loans, repayments), measurement and renovations, budgeting, tax returns, travel, insurance, etc.

Pre-requisites: -

QCE Points: 4

Assessment (both Year 11 and Year 12):

1. 2 x PSMTs (Problem Solving and Modelling Tasks)
2. 2 x exams



GENERAL MATHS

General Maths covers content that is real life applied but at a higher level than Essential. Work covers financial maths (annuities, investments), networks, bivariate statistics, time series, trigonometry, algebra, etc.

Pre-requisites: At least a B in Year 10 Maths, or at least a C+ in Year 10 Maths Extension.

Strong algebra skills highly recommended.

QCE Points: 4

Year 11 Assessment:

1. 1 PSMT (problem solving and modelling task)
2. 2 or 3 exams



GENERAL MATHS

Year 12 Assessment

1. 1 Problem Solving and Modelling Task (20%) (Unit 3)
2. 2 Internal Exams (15% each) (Unit 3, 4)
Each exam is 2 hours long.
3. 1 External Exam (50%)
Two papers; each 1.5 hours long.
Covers all of Unit 3 and 4.

General Maths is **significantly harder** than Maths A (old syllabus). Students entering General Maths need to be prepared to both complete homework and study/revise for at least a few hours each week outside of class time. General Maths has the highest fail rate in Unit 1 as students assume the subject is easy that class time is enough.



MATHS METHODS

Maths Methods is a course for students who love maths, or who love maths AND think there is a good chance they'll be studying maths at uni. Methods covers a lot: functions, algebra, calculus, statistics, probability, exponentials and logs, and trigonometry.

**Pre-requisites: At least a B+ in Year 10 Maths Extension (A preferred)
Strong algebra skills essential.**

QCE Points: 4

Students must purchase a Casio Graphics Calculator (approx. \$200)

Year 11 Assessment:

1. 1 PSMT (problem solving and modelling task)
2. 2 or 3 exams



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MATHS METHODS

Year 12 Assessment

1. 1 Problem Solving and Modelling Task (20%) (Unit 3)
2. 2 Internal Exams (15% each) (Unit 3, 4)

Each internal exam is 2 hours long, broken into a tech free and tech active paper.

3. **1 External Exam (50%)**

Two papers; each 1.5 hours long, TA and TF.

Covers all of Unit 3 and 4.

Methods is challenging, even for students who enjoy maths. Methods is *not* Maths B; it is significantly broader in scope and significantly harder in rigour, and requires dedication and hard work. As half of each exam is completed without a calculator, students need to be proficient at arithmetic. Methods is designed to prepare students for studying mathematics at university in fields such as Engineering, Medicine, Health, Science.

Methods can be completed through many universities as a bridging course.



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SPECIALIST MATHS

Like Methods, Specialist Maths is for students who enjoy maths and are confident, capable, flexible thinkers. Students taking Specialist must also be taking Methods, as Methods is expected knowledge. Specialist covers maths that is more abstract in nature (complex numbers, proofs, matrices); maths that builds on work covered in Methods (differential equations, further integrals) and has a heavy cross over with Physics (vectors, projectile motion).

Pre-requisites: At least a B+ in Year 10 Maths Extension (A preferred)

Strong algebra skills required.

QCE Points: 4

Students must purchase a Casio Graphics Calculator (approx. \$200)

Year 11 Assessment:

1. 1 PSMT (problem solving and modelling task)
2. 2 or 3 exams



SPECIALIST MATHS

Year 12 Assessment

1. 1 Problem Solving and Modelling Task (20%) (Unit 3)

2. 2 Internal Exams (15% each) (Unit 3, 4)

Each internal exam is 2 hours long, broken into a tech free and tech active paper.

3. 1 External Exam (50%)

Two papers; each 1.5 hours long – TA and TF.

Covers all of Unit 3 and 4.

Specialist Maths suits students who enjoy problem solving, are up for a challenge, and enjoy maths for the sake of maths. Specialist is not a pre-requisite for many courses due to its abstract nature and difficulty (like Methods, it's harder than Maths C), but is recommended for students intending to study Engineering or pure maths in any form.



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QUESTIONS TO ASK YOURSELF!

1. Do the careers you might be interested in have a university pathway and does it have a prerequisite for mathematics?
2. Are you meeting the pre-requisite for the maths you wish to study in Year 11? (If not, what will you both need to do by the end of the year to rectify this AND how will you go back and work on your weaknesses so you are ready for next year?)
3. Are you ready to commit to the workload for the subject you are intending to take?
4. Will your load of subjects allow you to spend the time you would need on the maths course you are intending to take?

